

The specification was amended herein to make a correction of a typographical nature. No new matter was presented and the amendment is deemed unobjectionable. Entry thereof is respectfully requested.

In the Office Action, the Examiner rejected independent Claims 32, 39 and 40 as well as dependent Claims 33, 35 and 37 under 35 U.S.C. 102(a) as being anticipated by Beam, U.S. Patent 5,368,370. The undersigned attorney respectfully traverses the Examiner's rejection of independent Claims 32, 39 and 40 and dependent Claims 33, 35 and 37 in view of the amendments presented herein and submitted herewith as well as the following argument.

The test for determining if a reference anticipates a claim, for purposes of a rejection under 35 U.S.C. §102, is whether the reference discloses all the elements of the claimed combination, or the mechanical equivalents, functioning in substantially the same way to produce substantially the same results. As most recently noted by the Court of Appeals of the Federal Circuit in Lindemann Maschinenfabrik GmbH v. American Hoist and Derrick, 221 U.S.P.Q. 481, 485 (1984), in evaluating the sufficiency of an anticipation rejection under 35 U.S.C. §102, the Court stated:

"Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim."

Applicant's amended independent Claim 32 now requires:

"A wheel and overlay assembly comprising:

a disk portion and a rim portion...;

an overlay juxtaposed said outboard surface of said wheel,...;

means attached to said inboard surface of said overlay and engaging said outboard surface of said wheel for temporarily securing and for positively positioning said overlay on said outboard surface of said wheel, said securing and positioning means being attached to said inboard surface prior to securing and positioning said overlay on said wheel and causing said overlay to be centrally located with respect to said rim

B

portion of said wheel and spaced from said outboard surface of said wheel so as to define at least one gap therebetween when said overlay is mounted on said wheel; and

a permanent adhesive..."

Applicant's amended independent Claim 39 now requires:

"An overlay for a wheel and overlay assembly having an outer surface and an axis, said overlay comprising:

an ornamental panel member...;

a decorative layer adhered to said first surface of said ornamental panel member;

means attached to said second surface of said ornamental panel member and engaging said outer surface of said wheel for temporarily securing and positioning said ornamental panel member on said wheel, said securing and positioning means being attached to said second surface of said ornamental panel member and causing said ornamental panel member to be centrally mounted with respect to said rim portions of said wheel and spaced from said outboard surface of said wheel so as to define at least one gap therebetween; and

adhesive means selectively positioned...;

whereby said decorative layer of said first surface substantially covers said outer surface of said wheel."

Applicant's independent Claim 40 now requires:

"In a composite vehicle wheel having a wheel with a web portion and a rim portion circumscribing said web portion, said web portion defining an outboard surface of said composite vehicle wheel, an ornamental panel member attached to said outboard surface of said web portion, said ornamental panel member having a first surface and an oppositely disposed second surface:

adhesive means selectively positioned between said ornamental panel member and said outboard surface of said wheel...;

a decorative layer adhered to said first surface of said ornamental panel member;

said ornamental panel member being a thin panel...; and

means for temporarily and permanently securing and positioning said ornamental panel member on said wheel, said securing and positioning means attached to said ornamental panel member and engaging said outboard surface for causing said ornamental panel member to be centrally mounted with respect to said rim portion of said wheel and spaced from said outboard surface of said wheel so as to define at least one gap therebetween;

whereby when said ornamental panel member is directly attached to said outboard surface of said wheel by said adhesive means said decorative layer of said first surface substantially covers said outboard surface of said wheel."

Beam, U.S. Patent 5,368,370, does not disclose a means attached to said inboard surface of said overlay and engaging said outboard surface of said wheel as set forth in Claim 32.

Further, Beam, U.S. Patent 5,368,370, does not have a means attached to the second surface of the ornamental panel member and engaging the outer surface of the wheel for temporarily securing and positioning the ornamental panel member on the wheel, as claimed in Claim 39.

Still further, Beam, U.S. Patent 5,368,370, does not have a means for temporarily and permanently securing and positioning the ornamental panel member on the wheel, the securing and positioning means attached to the ornamental panel member and engaging the outboard surface for causing the ornamental panel member to be centrally mounted with respect to the rim portion of the wheel.

Beam, U.S. Patent 5,368,370, discloses, at column 6, lines 3 through 14, "Also, the locking means 44 includes a plastically deformed section 50 of the inner connecting portion 38. The plastically deformed section 50 is created by forcing the inner connecting portion 38 through one

or more of the holes 35 in the center section 26 of the spider 20, i.e., the holes 35 between the lug stud holes 32. A swaging, pressing or extrusion process can be used to deform the applique 34 into the holes 35. As best shown in Fig. 5, the plastically deformed sections 50 may be peened in rivet-like fashion on the back side of the respective hole 35 to effect a structurally secure mechanical lock."

Therefore, in applying the test for anticipation as set forth in *Lindemann Maschinenfabrik GmbH v. American Hoist and Derrick*, supra, Beam does not anticipate either independent Claim 32, 39 or 40. Accordingly, withdrawal of the rejection of independent Claims 32, 39 and 40 under 35 U.S.C. §102(b) is respectfully requested.

Further, since dependent Claims 33, 35 and 37 depend directly or indirectly from independent Claim 32 and are but further delineations of the structure set forth in independent Claim 32, for the above reasons, dependent Claims 33, 35 and 37 cannot be anticipated by Beam under 35 U.S.C. 102(a). Accordingly, it is respectfully requested that the rejection of Claims 32, 33, 35, 37, 39 and 40 under 35 U.S.C. 102(a) be withdrawn for the above stated reasons.

The Examiner rejected dependent Claim 34 under 35 U.S.C. 103 as being unpatentable over Beam. Although not officially entering a rejection under 35 U.S.C. 103, the Examiner is of the opinion that Beam meets all of the limitations of Claim 32 and, accordingly, this will be treated as a rejection under 35 U.S.C. 103.

Applicant's attorney respectfully traverses the rejections under 35 U.S.C. §103 in view of the claims as amended herein and for the reason that Applicant's invention is not an obvious improvement over the prior art.

With respect to the rejections under 35 U.S.C. §103, it is noted in MPEP Section 706 that the standard of patentability to be followed in the examination of a patent application is that which was enunciated by the Supreme Court in *Graham v. John Deere*, 148 U.S.P.Q. 459 (1966), where the Court stated:

"Under Section 103, the scope and the content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved."

Accordingly, to establish a *prima facie* case of obviousness, the Patent Office must: (1) set forth the differences in the claim over the applied references; (2) set forth the proposed modification of the references which would be necessary to arrive at the claimed subject matter; and (3) explain why the proposed modifications would be obvious. To satisfy step (3) above, the Patent Office must identify where the prior art provides a motivating suggestion, inference or implication to make the modifications proposed in step (2). *In Re Jones*, 21 U.S.P.Q.2d 1941 (Fed. Cir. 1992).

The mere fact that the prior art may be modified by the Examiner does not make the modification obvious unless the prior art suggests the desirability for the modification. *In re Fritch*, 23 U.S.P.Q.2d 1780 (Fed. Cir. 1992). In the present case, the Examiner has failed to make a proper *prima facie* showing of obviousness since the Examiner has failed to show how the prior art suggests the desirability of the proposed modification.

Beam, U.S. Patent 5,368,370 is directed to the following problems associated with the prior art:

1) The steep additional cost for chrome plating both steel and aluminum wheels for the reason:

(a) most manufacturers of wheels do not typically chrome plate in-house and, therefore, must ship the wheels to a chrome plating specialist; and

(b) actual cost of chrome plating operations in large part is determined based upon the surface area to be plated; and because the entire wheel is dunked in electroplating tanks, a very large surface area attracts the chrome metal; and

(c) in an inordinately large amount of time and effort is required to prefinish the wheel prior to chrome-plating because the chrome-plating amplifies all surface imperfections; and

(d) finally, it is known that chrome-plating over plastic has many disadvantages as for example once the chrome-plating begins to chip away from its substrate, the dull, unattractive plastic is revealed.

To avoid these prior art problems, Beam teaches a composite vehicle wheel assembly having a permanent ornamental surface treatment. The ornamental applique, generally indicated at 34, is formed of a uniform thickness material, such as sheet steel or, preferably, stainless steel. The applique 34 overlaps the rim 12 and spider 20 to present an ornamental surface treatment to the visible outer portions of the assembly 10. The applique 34 has an annular outer connection portion 36 disposed adjacent the one outer rim flange 14. The outer connection portion 36 overlaps the one rim flange 14 and the spoke flange 28 of the spider 20. The applique 34 also includes an annular inner connection portion 38 overlying at least a portion of the center section 26. To aid in the fixation of the adhesive 32, the invention further includes a locking means, generally indicated at 44 in Figure 5, for mechanically locking the applique 34 to at least one of the rim 12 and the spider 20. The locking means 44 may include an annular catch 46 formed in the one outer rim flange 14. A peripheral edge 48 of the outer connecting portion 36 of the applique 34 engages the annular catch 46 to hold the applique 34 in place while the adhesive 42 cures. Also, the locking means 44 includes a plastically deformed section 50 of the inner connecting portion 38. The plastically deformed section 50 is created by forcing the inner connecting portion 38 through one or more of the holes 35 in a center section 26 of the spider 20, i.e., the holes 35 between the lug stud holes 32. A swaging, pressing or extrusion process can be used to deform the steel applique 34 into the holes 35. As best shown in Figure 5, the plastically deformed sections 50 may be peened in rivet-like fashion on the back side of the respective hole 35 to effect a structurally secure mechanical lock.

Beam is completely silent with respect to centrally positioning the overlay with respect to the rim portion of the wheel so as to concentrically temporarily secure the overlay to the wheel in a removable fashion. Since Beam is also completely silent with respect to the positions of the holes 35 as a net position for which all of the remaining dimensional characteristics of the wheel are dimensioned, it can be concluded that Beam is completely silent with respect to the location of the overlay centrally with respect to the rim portion of the wheel.

Applicant's invention is directed to the problems of galvanic action occurring between the use of stainless steel and the full face steel wheel as set forth in Beam; the problems of maintaining the central axis position of the overlay with respect to the wheel rim while the adhesive cures; and the adverse effects of the weight of steel wheels and associated costs and wheel balance problems resulting from the use of a metal stainless steel chrome-plated overlay in a wheel assembly.

In addressing these problems, Applicant's invention teaches an apparatus and method for assembling an overlay to an automotive wheel in which the overlay comprises the ability to accurately position and reliably permanently secure the overlay to the wheel by the use of selective application of an adhesive as well as the use of an intermediate positive fixing element for temporarily positioning and securing the overlay to the wheel during an interval in which the selectively positioned and applied adhesive cures in order to permanently adhere the overlay to the wheel. One aspect of the invention is that the overlay includes elements 120 which provide for the overlay to be temporarily secured to the outboard surface of the wheel in such a manner that the overlay is positively yet removably positioned on the outboard surface of the wheel. In combination with such temporary securing element, various embodiments for temporarily securing the overlay to the wheel are encompassed by the invention, that is, the use of high temperature resistant adhesives such as hot melt adhesive or an

adhesive tape, or the use of a mechanical element such as biased fasteners or resilient projections formed on the inboard surface of the overlay or the outer surface of the wheel are contemplated. In use, each of these elements cause the overlay to be spaced apart from the outboard surface of the wheel so as to define a gap therebetween as well as to concentrically locate the overlay with respect to the rim of the wheel in order to ensure aesthetically acceptable appearance (high luster surfaces, i.e., chrome plating, greatly amplify concentric misalignment between the high luster surface along the edges of the overlay and the rim of the wheel).

The wheel and overlay configuration illustrated in Figure 1 is useful for illustrating two of the three advantageous aspects of the present invention. The first aspect involves the use of one or more intermediate positive fixing elements for temporarily positioning and securing the overlay 16 to the wheel 10 during an interval in which the adhesive 30 is allowed to cure. A second and important aspect of this invention involves the selective placement of the adhesive 30 between the overlay 16 and the wheel 10 so as to improve the overall manufacturability, performance, and consumer perceived quality of the resulting wheel assembly. The first aspect of the invention is represented in greater detail by the embodiment shown in Figures 2 through 6 which reflect the use of a hot metal adhesive 20 located in the radial intermediate region of a gap 18 between the overlay 16 and the wheel 10. The adhesive 20 is capable of creating bond almost instantly, but is ill-suited for securing the overlay 16 to the outboard surface of the wheel over its service life, that is, once the wheel 10 is installed and in use on an automobile. Therefore, the adhesive 20 is only for temporarily securing the overlay to the outboard surface of the wheel while a slow curing adhesive 30 is permanently cured to make this bond. The concentrically disclosed snap tabs 120 extending from the inboard surface of the overlay 16 in the direction towards the wheel serve to illustrate the adaptability of concentrically removably positioning the overlay with

respect to the rim flange of the wheel. The snap tabs 120 provide for a biased resilient interference fit with the rim 112, and particularly, a depression 130 created by the rim's wheels bead seat. The snap tabs 120 further serve to space the inboard surface of the overlay 116 axially apart from the outboard surface of the wheel 110 such that a gap 118 is formed in which the curable adhesive is selectively deposited. A further mechanical element 220 for temporarily positioning and securing an overlay 216 to a wheel 210 is shown in Figure 4. As in the first embodiment, the alternative arrangement is attached to the backside of the overlay to engage an opening 220c cast or machined in the outboard surface of the wheel such that the mechanical element 220 can be held with respect to the outboard surface of the wheel to provide a gap therebetween for the permanent adhesive.

The differences between Applicant's invention and the prior art reference cited by the Examiner in the rejection under 35 U.S.C. §103 is quite clear. The solution taught by the Beam reference is directed to problems totally different than that described in Applicant's invention. For example, Beam is directed to the steep additional costs associated with chrome plating both steel and aluminum wheels while Applicant's invention is directed to problems associated with maintaining and accurately positioning as well as reliably permanently securing the overlay to the wheel by the use of selective applications of an adhesive so as to improve the manufacturability of the wheel, reduce costs of manufacturing, and not detrimentally effecting wheel balance, performance and consumer perceived quality of the wheel.

To resolve these problems Applicant teaches the use of mechanical elements which provide for the overlay to be temporarily secured to the outboard surface of the wheel in such a manner that the overlay is positively positioned yet removable from the outboard surface of the wheel. In use, each of these mechanical elements cause the overlay to be spaced apart from the outboard surface of the wheel so as to define a gap

therebetween as well as concentrically locate the overlay with respect to the rim of the wheel in order to ensure aesthetically acceptable appearance. Clearly, Beam does not suggest, infer or imply the use of a mechanical element which is attached to the inboard surface of the overlay and engages the outboard surface of the wheel to concentrically locate the overlay. The rivet-like deformed section 50 of Beam is not a temporary securing means and does not position the cover concentrically with respect to the wheel. Beam is completely silent with respect to the teachings of using the holes 35 as a net locating position from which all of the wheel dimensions are located in order to provide a concentric relationship of the outer surface of the overlay with respect to the rim portions of the wheel. In fact, the teachings of Beam are completely contrary to the teachings of Applicant's invention in that Beam teaches the location of the outer connecting portions 46 and 48 with respect to the rim and then deforming the applique 34 into the holes 35 by a swaging, pressing or extrusion process. Accordingly, this rivet-like deformed section 50 is certainly not any form of temporary positioning means in order to ensure alignment of the outer rim of the overlay with the outer rim of the wheel.

Accordingly, it is respectfully asserted that the teachings of Beam would not provide one skilled in the art with a basis for making the *claims?* overlay as set forth in Applicant's invention. There is absolutely no suggestion whatsoever with respect to the Beam reference which either infers, implies or suggests the apparatus as set forth in the claims. It is respectfully submitted that but for the disclosure made by the Applicant in the application, there is no suggestion, implication or inference in Beam in order to obviate Applicant's invention as taught by the claims presently pending in the application. Thus, it is only through Applicant's teachings and disclosure that one of ordinary skill in the art would appreciate the need for mechanical elements in order to temporarily, removably locate the overlay with respect to the rim portion of the wheel. In view of this, a

person of ordinary skill in the art would not seek to use the teachings of the Beam reference to produce the results that Applicant's invention as now claimed teaches.

It is well settled patent law that the mere suggestion by the Examiner that the teachings of a disclosure can be used singularly or in combination with other references to obviate Applicant's invention is insufficient unless the prior art contains some suggestion of the inference, implication, suggestion or desirability for combining the prior art references to teach Applicant's invention. Here, the prior art contains absolute no suggestion, inference or implication whatsoever for using its teachings as interpreted by the Examiner to reject the claims as amended under 35 U.S.C. 103 or to teach the invention as claimed according to Applicant's disclosure. Therefore, it is respectfully suggested that the Examiner is using hindsight reconstruction and the Applicant's own teachings in an attempt to obviate Applicant's invention after having the benefit of reading Applicant's application. Absent recognition of the problem faced by the Applicant, how can the prior art possibly suggest the novel combination claimed by the Applicant as a solution to the problems set forth therein. Therefore, Applicant's invention is an unobvious improvement over the art of record and not an obvious modification of the reference cited by the Examiner. When viewed singularly the prior art fails to teach an overlay and wheel assembly which combines the panel member with it decorative layer with a means attached to the backside of the ornamental panel member engaging the outer surface of the wheel for temporarily securing and positioning the ornamental panel member on the wheel thereby causing the ornamental panel member to be centrally mounted with respect to the rim portions of the wheel and spaced from the outboard surface of the wheel so as to define at least a gap therebetween for selective placement of an adhesive.

In view of the foregoing remarks, the undersigned attorney respectfully submits that the amended independent claims as well as the dependent claims are clearly allowable. Therefore, Applicant's attorney respectfully requests that the Examiner's rejection under 35 U.S.C. §103 be withdrawn from the claims as amended herein and that a formal Notice of Allowance be issued therefor.

The Examiner in paragraphs 1 and 2 of the Office Action further recites a double patenting rejection with respect to the claims of record. For the Examiner's information, the copending application Serial No. 08/479,335 is now abandoned and the undersigned has received a Notice of Abandonment dated April 30, 1996, Paper No. 5, in the copending application. Accordingly, it is respectfully asserted that this double patenting rejection is now moot and respectfully requested that the rejection be withdrawn.

The undersigned wishes to express his appreciation to the Examiner for the indication of allowable subject matter in Claims 1 through 31 as well as Claim 38. In view of Claims 32 through 37 and 39 and 40 being in condition for allowance, it is respectfully submitted that all the claims remaining in application are now in condition for allowance and, accordingly, it is respectfully requested that a formal Notice of Allowance be issued therefor.

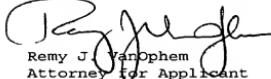
In the event the Examiner is not persuaded of the patentability of the claims as amended herein, he is respectfully requested to enter the amendment for purposes of appeal.

For the convenience of the Examiner a copy of the claims as currently pending in the application, omitting all bracketed text and underlining is included herewith as Exhibit A.

If the Examiner has any questions with respect to any matter now of record, Applicant's attorney may be reached at (810) 362-1210.

Respectfully submitted,

VANOPHEM MEEHAN & VANOPHEM, P.C.

  
Remy J. VanOphem  
Attorney for Applicant

Registration No. 27053

755 W. Big Beaver Rd.  
Suite 1313  
Troy, MI 48084  
(810) 362-1210  
Attorney Docket: LIII126A US  
RJV/lap

Certificate Under 37 CFR 1.8(a)

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner of Patents and Trademarks, Washington, D.C. 20231, on 7/2/96.

Date: 7/2/96

  
Remy J. VanOphem, Reg. No. 27053